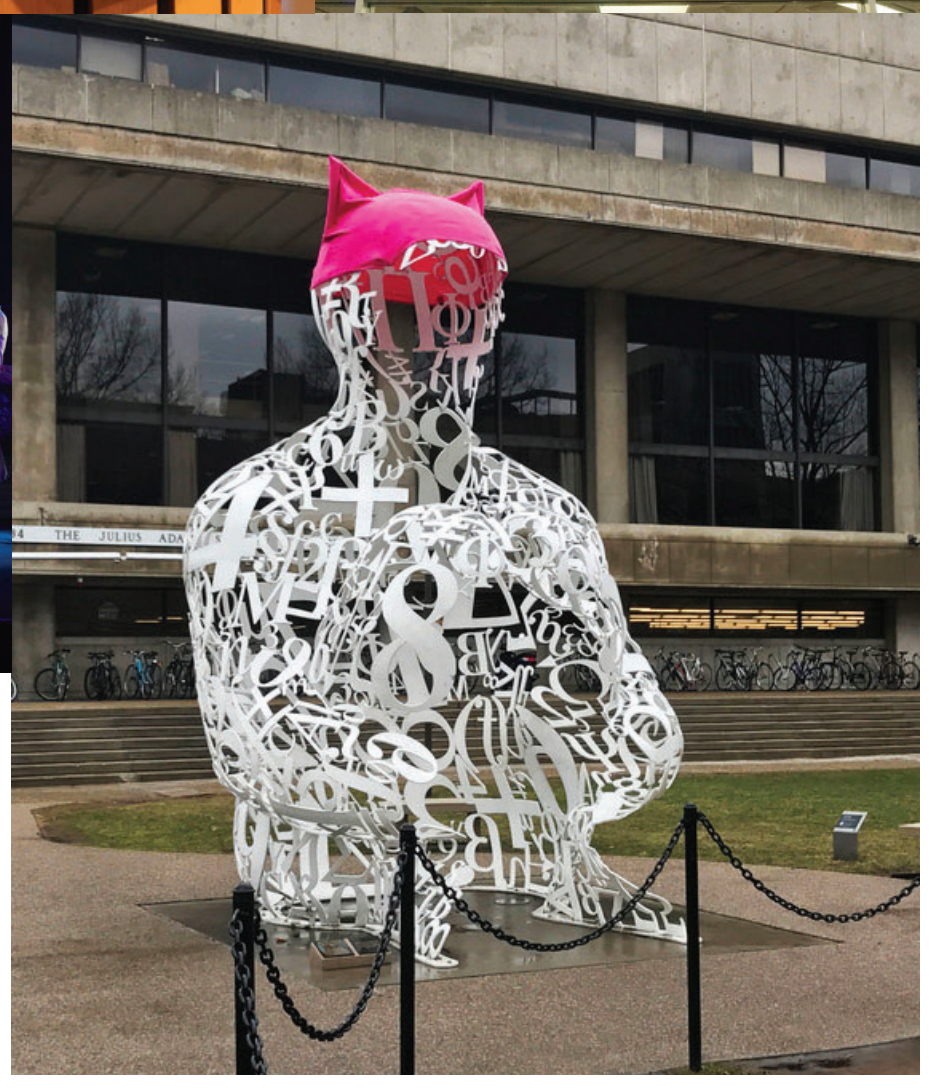

The Tech

2017 IN REVIEW

Dear readers,

If we thought 2016 was a tumultuous year, 2017 has perhaps proven even more so. But the MIT community has met the upheavals from both within MIT and the world outside with inspiring resilience.

In *Star Wars: The Last Jedi*, the malevolent Snoke observes that "darkness rises, and light to meet it." Sinister thought the speaker may be, the words themselves are apt and offer hope: with every challenge has and will come people to counter it.

This past year saw a marked increase in political engagement on campus, in local voting as well as in response to federal policies; meanwhile, students unveiled pressing issues of food security at MIT and pushed to combat it. And every hour of every day, the MIT community works to tackle the problems of the world with every tool that's available — and making new ones if they're not.

The increasingly complicated terrain of media also reminds us of the importance of careful reporting and investigation. The controversial closing of Senior House, MIT's oldest residence hall, dominated much of campus conversation last summer. To have a third-party's records of events in such scenarios is invaluable: first, as a centralized source of information for students at the time of the evolving story; second, as a contribution to institutional memory, preserving lessons for future generations and keeping those involved responsible.

In the spirit of learning from the past to prepare for the future, we invite you to join us in reviewing the news of this past volume, much of which will have repercussions in the months and years to come. MIT's influence continues to expand as the Institute seeks, through ambitious partnerships and initiatives, to shape the future of not only Kendall Square, but the future of societies across the globe.

Even if you never read *The Tech*, I urge you to peruse this Year in Review.

— Vivian Zhong
Volume 137 Editor in Chief

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OPINION IN REVIEW

By 2020, the minority youth population in the United States will outpace the majority's. While America is moderately ethnically-diverse relative to the rest of the world's countries, clearly, this red-white-and-blue "melting pot" of cultures and ethnicities has certainly influenced the course of American history. Accordingly, many have found pride in America's diverse and kaleidoscopic DNA—objectively because heterogeneity makes for better problem-solvers but also subjectively, and perhaps more importantly, because we have grown up with each other. We have graduated elementary school with each other, a disproportionately large number of happy-go-lucky-us aspiring to be astronauts and professional athletes. We have eaten lunch together, often times wondering, "What's in your lunch box?" This year, we found out that the melting pot cooking up our country's progress was a pressure cooker.

Coined in the late 1990s, the term "diversity fatigue" describes much of what we have seen on the MIT campus and what has manifested throughout our country. The idea is that enforcing diversity builds tension and contempt, albeit slowly. To provide an example relevant to the collegiate experience, affirmative action has allowed for race to be one of several factors in the college admissions process since University of California v. Bakke (1978). For better or for worse, our racial and ethnic backgrounds were likely put on the consideration table when we submitted those Common Applications and that dreaded MyMIT one. With initiatives such as affirmative action kindling all our deepest judgements, the melting pot—the pressure cooker—has exploded this year: the truly self-identified victims who are "fatigued" are voicing their opinions, be it in the ballot box or on social media.

The end of 2017 marks a full year of President Trump's tenure as President, and with it emerged many voices that had been inaudible, on-campus especially. 2017's summer also brought a plan to overhaul one of MIT's most-treasured dorms, Senior House: Pilot 2021. While these are ostensibly threats to diversity, we must also consider how these major events have uncovered opinions that have been swept under the rug previously. We are diverse in so far as we, at the very least, try to understand others' opinions. It is a metric for our powerfully human capacity to sympathize.

Now, let's make sure we get the melting pot right this time around. Let us make sure that we appreciate the fact that we are individuals—with different backgrounds, with different hopes, with different dreams, with different opinions. We much look forward to reading your opinions and wish you a wonderful, enlightening year.

— Steven Truong
V137 Opinion Editor

After the bubble burst

MIT's partisan positions discourage debate and alienate students

By Daniel J. Newman

In the months leading up to the presidential election, the mostly left-leaning media and social networks promised a Hillary Clinton victory. Many students understandably lived inside a liberal bubble. However, after Donald Trump's surprising victory, it soon became clear that these students had been out of touch with the concerns of working class citizens living in the heart of this country. In the months since the bubble burst, MIT could have taken a nonpartisan position that attempted to broaden the community's perspective and to encourage disappointed students to make the best out of the situation. Instead, MIT's unproductive official response has reconstructed the divisive bubble and alienated many on campus.

In the immediate aftermath of the election, some professors pushed back deadlines and excused students from tests and assignments. The UA leadership informed the student body that they had emailed two administrators asking for "faculty to be more understanding with coursework." For those students who were distraught about the election, support groups were established. Puppies were disseminated. Would similar actions have been taken if Hillary Clinton had won? Unlikely. Although the UA leadership may have thought that their actions were justified, in reality, they were not solving problems. There is nothing productive about coddling those who supported the losing candidate, as it only teaches that one does not have to assimilate back into society and can instead hide in safe spaces with hashtags like #NotMyPresident. It is difficult for students to effectively cope and grow from the situation when our official representatives encourage self-pity and denial rather than the values in which MIT normally takes great pride: learning and interacting with reality.

After President Trump issued an executive order restricting the immigration of people from seven countries, the Chancellor's office sent an email inviting students to a rally in Copley Square. It was also noted that all faculty were invited. While MIT should be applauded for doing everything in its power to help the international students affected by this order, the administration overstepped by facilitating a protest and inviting students without even fully explaining the details of the executive order. The UA invited students to a Call Congress Phone Bank to "oppose the Executive Order restricting entry of students and scholars to the United States." The email described the event as "nonpartisan," but bribing students with food and handing out scripts outlining how students should tell their representatives they oppose an executive order from the leader of the Republican Party is highly partisan. Furthermore, at the time of the phone bank, both MIT undergraduates affected by the order had already returned to MIT. This strongly suggests that the UA leadership was hosting the event to push their own liberal views — a clearly inappropriate use of MIT funds.

As a consequence, many conservative MIT students now feel alienated on campus and are understandably fearful of expressing their alienation. It is endlessly ironic that liberals preach tolerance, yet are often so intolerant of those who disagree with them. By constantly condemning Trump through official channels and pitting MIT's "values" against the values of a large fraction of the electorate, MIT's partisan stance has only exacerbated the polarization that has led us here. A nonpartisan approach by MIT would have been far better for all MIT students. In an effort to promote diversity of both culture and ideas, MIT should encourage its students to strive to see both sides of the political spectrum so as to find common ground. Such a nonpartisan approach would lessen the tension across campus, helping the upset students to convert disappointment into awareness and protecting the conservative students from the backlash. The MIT community as a whole could come together, heal, and set an admirable example for the rest of the country. Instead, MIT's official stance has had the unprogressive effect of promoting bullying and isolation of the conservative segment of the student body, as well as discouraging meaningful debate across party lines.

MIT students and faculty are normally extremely willing to interact with the forces of nature that stretch beyond our campus, even billions of miles away in space. Everyday we witness the benefits that come with this openness for our campus and the world. The bubble doesn't exist when we study in our labs and classrooms. Let's also pop the bubble that surrounds our political conversations, acknowledge the diverse spectrum of views on our campus, and expose ourselves to reality.

Daniel Newman is a member of the Class of 2017.

Beyond the bubble

MIT's official responses to political developments are warranted and appropriate

By Hairuo Guo

Few accusations ring as loudly or often as that of corrupting the youth. Last Thursday Daniel J. Newman became the latest person to yank that village bell, taking the UA leadership and Chancellor's office to task for their actions in the current political climate. He makes the following allegations in his opinion piece: that by asking faculty to be understanding with coursework in the wake of the election and by inviting students to rally against President Trump's immigration order, both committed the crime of partisanship and added more surfactant to the proverbial bubble. In doing so, the accused forced upon students their own liberal vices: self-pity, denial, and a crippling reliance on therapy puppies.

While the campus wide dependency on adorable dogs resists debate, the rest of Newman's points are more assailable. First, there is the issue of "nonpartisanship." Indeed, Federal code prevents tax-exempt non-profits like MIT from contributing to the campaigns of candidates and from devoting a substantial portion of their activities to lobbying. However, to assume that these imply a legal obligation towards absolute political neutrality is to perform a dazzling feat of mental gymnastics. Just as how Brigham Young University (another tax-exempt educational non-profit) may take a moral stance and impose upon its students a restrictive honor code, so is it MIT's right — if not its duty — to act in accordance with its own mission. That mission is, officially, "to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century."

Were invitations to oppose the Executive Order in pursuance of this mission? Newman contends that both undergraduates immediately affected were able to return to campus by the time of the rally; he neglects to account for the fact that had the order remained uncontested, it would have precluded future trips abroad. He also fails to consider the graduate students and faculty who were and would have been impacted — a combined population greater in number than the undergraduates. As far as faculty and students must be physically present to teach, to conduct research, and to learn, it is evident that the Chancellor's office and the UA leadership did act rightfully, even appropriately.

The same sort of straightforward reasoning implies that calls for faculty understanding were also justified. Newman makes the astute observation that Trump's victory was largely unexpected among students; unfortunately, he then takes this to mean that the outpouring of emotion that followed stemmed from soreness over Hillary Clinton's loss. To quote our president, "Wrong." What shook so many then and has since galvanized more is not that a Republican won and a Democrat lost: it is that an impulsive, crass, and morally bankrupt man was chosen for the nation's highest office. Trump's attempts to warp objective reality with his "alternative facts" amount to an attack on the notion of knowledge itself. His reflexive scapegoating of the media is a threat to democracy — his childish denial of climate change a threat to the world. If we are indeed to embrace the values of "learning and interacting with reality," as Newman offers, and the MIT mission to "advance knowledge and educate," then we must continue to look for the full implications of Trump's time in power, just as we struggled to do so on November 9.

Newman finds "endless irony" in the hypocrisy that liberals apparently exude, but he forgets to look closer to home. Despite referring to safe spaces with derision, he seems keen on constructing his own shelter against uncomfortable truths. The fact is that this is not another chapter in the age-old conflict between liberals and conservatives — if those two words are even anything more than empty epithets. Trump's manipulation of the working class and his utterly unpresidential character should worry any sensible person. A cursory glance finds consternation emerging from across the political spectrum and with it, a growing willingness to engage. Instead of retreating into the comfort of their bubbles, people are taking action. They have realized that although he may be the nominal leader of the country, he is not their leader.

Which begs these questions, to those who still feel alienated: why is he yours, and to what ends of the earth will you follow him?

Hairuo Guo is a member of the Class of 2017.

Student leaders respond to Pilot 2021

Student input is needed for a program that would affect all students across MIT

By Sarah Melvin, Yuge Ji, Ayomide Fatunde, Robert Binkowski, and Sasha Rickard

Last week, Chancellor Barnhart told *The Tech* that "MIT students" would be housed in Senior House this Fall, but could make no guarantees beyond this vague statement. Below this article on *The Tech* homepage was a story about the large decline in senior gift donations this academic year, fueled by student frustrations over a lack of transparency and student input in recent student life decisions at the Institute. With the revelation of this newest closed-door decision, it seems clear that MIT has yet to abandon this trend of limited student engagement that may further exacerbate the course of declining donation rates.

This week, Chancellor Barnhart clarified these previous statements in an email to Senior House residents. These students were informed that if they wish to continue living in the place they call home, they must now apply to live in a new community developed for the dormitory. Residents "whose applications are approved" in this "very selective process," as well as New House students already scheduled to move in, will live alongside a large cohort of freshmen who will take part in Pilot 2021, a new freshmen living program.

It is concerning that this freshmen pilot program has been developed thus far with no student input, despite the fact that its impact will be felt by students all across campus. It seems the result of Pilot 2021 will be to introduce a predominantly freshmen living community, a policy topic that has been highly controversial among students in the past. The name itself could imply that, if successful in the eyes of its developers, this program will be expanded to other living communities on campus. If MIT seeks to move towards a new freshmen living model, they must go about this fundamental shift in the structure of housing with thorough student input.

> **MIT living communities are not simply another vehicle for career development and academic exploration, but provide students a place of acceptance and an opportunity to learn life lessons that cannot be taught in a classroom.**

However, the impact on other parts of campus is not only dependent on future expansion, but will be felt starting this fall. As Pilot 2021 intends to move more freshmen into Senior House than ever before, other dorms across campus will experience a significant reduction in the number of first-year students able to join and contribute to their communities. In addition, there is concern that this redistribution may further exacerbate overcrowding in dormitories on West Campus, in the event that the pilot does not attract enough freshmen.

> **If MIT wants to remain such a unique and special institution, it cannot take on top-down initiatives at the expense of existing communities on campus and the erosion of student-admin collaboration.**

Because its development thus far lacked student involvement, Pilot 2021 does not address the actual issues students face in their first year at MIT. Beyond replacing the Senior House community, it is unclear what problem this pilot program intends to solve, as it fails to address the real struggles of at-risk MIT students. Does MIT really believe mental health issues on campus can be remedied through mindfulness meditation, healthy-eating, and yoga? Does the Institute think freshmen who opt-in to an academically oriented dormitory focused on "career exploration" are the students who are in most need of the extra guidance and support?

In this pilot plan, they seem to miss what is important about Senior House and the MIT housing system as a whole. MIT living communities are not simply another vehicle for career development and academic exploration, but provide students a place of acceptance and an opportunity to learn life lessons that cannot be taught in a classroom. Senior House is a community of students who support one another, regardless of their identity or background, and these communities cannot be developed in a boardroom meeting or brought to life from a written proposal. Our housing communities at MIT are supportive and unique because they are organically grown by the students who inhabit them.

> **Senior House is a community of students who support one another, regardless of their identity or background, and these communities cannot be developed in a boardroom meeting or brought to life from a written proposal.**

There is a way forward to preserve MIT's unique values of student engagement and collaboration. In order for these new programs to be successful, MIT must secure support from students by including them in the conversation from the onset. We urge the administration to incorporate students in the selection of returning community residents and to guarantee transparency in this process. We further urge the administration to incorporate students in the development of Pilot 2021 in order to ensure this program actually addresses the needs of incoming freshmen and embodies the positive values of the Senior House community. Only through this teamwork between students and administrators can Senior House be built into a stronger community that upholds its best ideals: artistic expression, queer culture, and acceptance of all students regardless of their identity or background.

If MIT wants to remain such a unique and special institution, it cannot take on top-down initiatives at the expense of existing communities on campus and the erosion of student-admin collaboration. We pride ourselves on a culture of collaboration, and we must emulate that in student life decision-making in order to engage with a diversity of perspectives and uncover the optimal solution.

Sarah Melvin '18, Undergraduate Association President
Yuge Ji '18, Dormitory Council President
Ayomide Fatunde '18, Panhellenic Association President
Robert Binkowski '18, Interfraternity Council President
Sasha Rickards '18, Living Group Council Speaker

Senior Haus needs to change

'If you flirt with the idea that maybe something isn't right in Haus, you're likely to be put down and suppressed.'

By Jacob Higgins

I can't sit back and continue to let East Side students and alumni speak on our behalf. While still respecting the privacy of Senior Haus, I will speak only for myself, a current Class of 2019 Senior Haus resident.

Despite the consistent talking points to the contrary, there are real problems in Senior Haus. For the sake of privacy of Senior Haus residents, I will not go into specifics. These problems aren't necessarily a couple of people making poor decisions for themselves; everyone makes poor decisions sometimes, and in Haus we try to support each other. But that support can be abused to the point where it becomes enabling. The Senior Haus culture of acceptance and openness has continued to be abused, and it has become too easy for us to allow and even justify someone putting oneself or others in harm's way.

Maybe this is what begets the unspoken, unwritten law within Senior Haus: Thou shalt say the right thing or nothing at all. To say the wrong thing to residents is to risk being ostracized, or worse, to say the wrong thing to admins is to risk depopulation and the wholesale destruction of 100 years of culture. If you flirt with the idea that maybe something isn't right in Haus, you're likely to be put down and suppressed. We've normalized the idea that when we say "in Senior Haus, you can be whomever you want," we sometimes neglect the vital clause "as long as it doesn't harm you or others."

I do not believe that these parts of Senior Haus are worth saving. I do not believe that a culture of enabling, of turning a blind eye to others' problems is worth saving. I do not believe that a community that thinks information is currency to be bartered and exploited is worth defending. I do not believe that a culture that spawns alumni who force ideas upon current residents and propagate a hivemind is worth preserving. I don't want my home to welcome only a select few while dismissing and excluding others for not being "Senior Haus" enough.

> **I do not believe that these parts of Senior Haus are worth saving. I do not believe that a culture of enabling, of turning a blind eye to others' problems is worth saving. I do not believe that a community that thinks information is currency to be bartered and exploited is worth defending.**

This time last year, I wrote an essay about my experience as a freshman in Senior Haus. I was joining a chorus of voices expressing their love for the Senior Haus community and their concern that the MIT Administration was actively working to push out our home. Back then, I had begun to convince myself that these bad parts of my community were just manifestations of my own social anxiety. Despite those worries, I knew I loved Senior Haus. I had never experienced a community that seemed so perfect in their imperfections, a community that would accept me for the short, ambiguously ethnic, queer kid I am.

That fall, the Senior Haus population went from 142 students to under 100. Student rooms were gutted to make space for more administrators, a study space, a yoga room. A small subsection of our emaciated, frosh-less Senior Haus community threw ourselves into the "Turnaround Team" with various goals — getting freshman back in Haus was central. For me, as a part of the Personal and Academic Subcommittee, this Turnaround was an opportunity for us to be intentional with our community. It was an opportunity to prove that, more than just a dorm, we are students who take care of each other, who welcome each other's differences, and who will keep each other accountable. These are what we advertise as our community values. This was our chance to prove — to ourselves and everyone else — who we are and what we care about.

Since then, I've continued to find friends and support within Senior Haus in ways I was not able to find anywhere else at MIT. After spending the entire year working on the Turnaround Team, we have implemented Student Support Services (S^3) and Mental Health and Counselling offices within Senior Haus — something extremely helpful and completely unique to Haus; we have taken tentative steps to understand the thoughts of our community in its entirety and our drug use habits; we've reorganized ourselves and our spaces to best support each other.

> **To the current residents of Senior Haus and the members of the Class of 2021 who are afraid that the open, accepting home that they hoped to find will no longer exist, please know that, although there will be many more eyes on us next year, we can decide who we are and what we care about — but only if we give it a chance.**

This past year, on the Turnaround Team and in Senior House as a whole, we have sacrificed a lot academically, personally, and socially in order to deal with the Turnaround Team and all its ramifications — but we have done so much good! I think we've taken many important steps in moving our community forward. Before the Chancellor's decision was made, I felt we were even more aligned with our declared values. We found a way to be intentional in our support for people who have struggled to find acceptance and respect in openness and vulnerability elsewhere.

In spite of this progress, many people did not take the Turnaround seriously, and I've seen how the abuse of Senior Haus's accepting culture has forced the MIT Administration to choose between one of two options: complete depopulation of Senior Haus or a Turnaround 2.0 of which students could not opt out. And so, what was once Senior Haus will become "Pilot 2021 (in Senior Haus)."

I don't want to see the (admittedly yuppie) "three dimensions" of the Pilot 2021 program as the death of the Senior Haus community. I don't agree with much of the Pilot 2021 platform. It's hard for me to trust the Administration after everything they've done over the last year. At best, the one-email worth of information on the Pilot 2021 program seems to hint at a lack of understanding about how to foster a community whose members' demographics align with those of Senior Haus; at worst, it betrays an intentional step to prevent the people who would have benefitted from living in Haus from participating in the community. Nonetheless, I want to see it as a rough draft along the path of understanding just what it is we care about and how we can get there. If we abandon Senior Haus now, we will not be able to give anyone the experience of Senior Haus that we hold so dear.

To the current residents of Senior Haus and the members of the Class of 2021 who are afraid that the open, accepting home that they hoped to find will no longer exist, please know that, although there will be many more eyes on us next year, we can decide who we are and what we care about — but only if we give it a chance. We can shape this community.

First published on Medium.com

When systems biology fails to predict the biology of people

The Tech staffers weigh in on their thoughts on Ayyadurai's political beliefs

By Fiona Chen and Whitney Zhang
STAFF WRITERS

Shiva Ayyadurai, an MIT alumnus with a BS in EECS, Masters in Animation, Masters in MechE, and PhD in Systems Biology, is a Republican candidate for the 2018 United States Senate election for Massachusetts. Most of the coverage surrounding Ayyadurai thus far has been about his controversies and his interactions with the conservative fringe. We discovered, however, that little writing exists about his actual political views, and decided to sit down with Ayyadurai in September for an interview to gain a better understanding of his political beliefs.

Ayyadurai has identified a few key issues in his campaign with his slogan "Clean Food, Clean Air, Clean Government; Real Jobs, Real Health, and Real Education." He believes strongly in the power of technological innovation to solve global problems and views the free market as a force for good. These values likely stem from his professional background in science and technology but lack thereof in governance, which he underscores to claim that he is more connected to the everyday man than the traditional "establishment" politician. However, we found that Ayyadurai falls prey to the same contradiction that describes many politicians: despite his anti-establishment rhetoric, his faith in the free market and technology and his opposition to government regulation mean that he more closely aligns with the economic and political elite than with the common man.

"Clean Government" is the central focus of Ayyadurai's campaign — he spent much of the interview discussing the roots of his anti-establishment beliefs and criticizing establishment politicians and corporate lobbyists' power in the government. Ayyadurai calls MIT his political "training ground," where he first recognized that establishment politicians do not serve the common people. At MIT, he started The Student, a newspaper known for its radical anti-establishment views, with Arnold Contreraz, head of the Mexican American students' union and was involved in various other political activities such as the apartheid divestment movement. To this day, he has retained his wariness of career politicians and both the Democratic and Republican parties. Ayyadurai proudly expressed to us, "I've never voted since 1983; I've never voted," and explained that he was only running as a Republican candidate to give "the Republicans a chance" and that if they didn't treat him right, he would do his "own dance."

Interestingly, however, when we asked Ayyadurai how he wished to "clean up government," his answer largely involved technology, demonstrating the large influence of his experience within the computer science industry and the far smaller influence of his prior political involvement. Ayyadurai said that, in order to decrease the influence of lobbyists in government, more technology should be disseminated to allow individuals to communicate directly with their governments. However, if Ayyadurai's proposal were a sufficient solution, the expansion of email, phones, and online petitions should have massively decreased the power of lobbyists over the past several decades, but the opposite trend has been true. His seemingly noble solution ignores corporations' wealth advantage, which allows them to spend over $3 billion per year funding dubious research and influencing elections. By holding so much confidence in the power of technology, Ayyadurai obscures a far more important cause of government corruption: economic inequality.

Another central issue in Ayyadurai's campaign is healthcare, which he refers to as "Real Health" and "Clean Food." Ayyadurai believes that debates should be centered around preventative care rather than insurance or treatment, which he calls "crisis management care." He believes that the main issue with healthcare is that people do not have access to clean foods and exercise plans. Consequently, Ayyadurai believes that the government should focus more on helping the free market develop businesses to sell cheap and healthy food and less on creating or improving healthcare programs such as Medicaid or Medicare. He supports efforts to repeal the Affordable Care Act (ACA) and went as far as to call the policy "garbage," claiming that it "incents [*sic*] people to get sick" because they know they have the option to receive care after getting sick.

> **Ayyadurai's vagueness on the political mechanisms that could resolve climate change seems to indicate that he is over-reliant on the power of the free market and technology to resolve problems, but has not adequately considered the policy mechanisms that could make the innovation and implementation of this technology possible.**

While lifestyle choices are important factors in a person's health, it'd be overly reductionist to assume that lifestyle changes are a sufficient substitute for healthcare policies, or that the two are mutually exclusive. Lifestyle changes cannot cure existing chronic diseases, eliminate the risk of genetic diseases, or help people who need health coverage for other reasons, such as birth control. Ayyadurai's understanding of health at the molecular level does not translate to an understanding of healthcare policy, which is geared towards ensuring widespread accessibility to medical services, and necessitates tackling non-scientific problems such as insurance risk discrimination and government funding.

"Clean Air" refers to Ayyadurai's environmental platform. Ayyadurai believes that the solution to climate change lies in removing barriers to market entry for companies that create environmentally beneficial technologies. Currently, he explains, "There are some amazing technologies out there, but crony capitalism doesn't allow them to reach the market." However, when asked about what policies he would implement to encourage innovation, he avoided giving a clear answer by claiming that there isn't one single policy that could resolve the issue. When asked more specifically whether he would support a carbon tax or a cap and trade system, policies that scholars argue could drive green tech innovation, he again avoided giving a clear answer and instead went into a critique of the Paris Agreement. Ayyadurai's vagueness on the political mechanisms that could resolve climate change seems to indicate that he is over-reliant on the power of the free market and technology to resolve problems, but has not adequately considered the policy mechanisms that could make the innovation and implementation of this technology possible.

During our interview, Ayyadurai also briefly commented on another part of his platform, "Real Education," saying that more vocational technical schools should be implemented. He did not comment on the last part of his platform, "Real Jobs," and did not reply to our follow up email.

Oddly, Ayyadurai appeared to not have a foreign policy platform. When we asked Ayyadurai what his foreign policy platform was, he did not respond with any specifics, and instead just described his general principles that globalisation and trade are good, while military interventionism is bad.

When asked about more specific topics, such as terrorism, immigration, and North Korean nuclear development, Ayyadurai gave answers that were roundabout, unclear, or contradictory. For example, when asked about his stance on terrorism, he only vaguely claimed that the U.S. should decrease its military interventionism, as it fuels the growth of terror groups. However, he also insisted that the U.S. should increase its vetting practices of immigrants, clearly not seeing the contradiction between his goal to stop provoking terror groups through harsh policies, and his proposed practice of increased vetting.

This lack of a clear foreign policy may be the result of Ayyadurai's focus on science and technology above all else. Foreign policy is an area without clear scientific answers and requires nuanced understanding of political theory, international institutions, and military power, which Ayyadurai seems to lack.

Our interview with Ayyadurai revealed a politician who, by relying too heavily on the free market, science, and technology as solutions, obscures the deeper and much more complex sociopolitical issues underlying topics a senator must tackle, such as corruption, health care, climate change, social inequality, and foreign policy. We live in a world of rapid innovation, where science and technology can provide useful solutions to our problems, and our governments should make sure to include leaders and policymakers who understand these fields. However, this scientific knowledge must still be combined with an awareness of technology's limits, an understanding of the policy mechanisms that work in conjunction with technology, and an acknowledgement of the broader social forces at stake.

Update: This article has been updated to clarify that Ayyadurai is a candidate for the United States Senate election for Massachusetts.

SPORTS IN REVIEW

The year of 2017 provided many surprises for the MIT athletics community, both within and outside of varsity sports. As several changes were made to the overall experience of playing sports at MIT, mostly in the positive direction, we highlight some of the top moments in sports at MIT this past calendar year.

—Ahaan Rungta
V137 Sports Editor

WOMEN'S VOLLEYBALL GOES BACK-TO-BACK

In November, the top-seeded MIT Engineers women's volleyball team, who went an overall 28-2, sweeped No. 3 Wellesley College en route to their second straight NEWMAC championship. That same week, they tallied six NEWMAC Academic All-Conference Awards. Senior Lisette Tellez and juniors Abby Bertics, Christina Liao, and Carly Staub were all repeat honorees while Carly Silvernale '19 and Madison Lee '20 were both selected for the first time.

WOMEN'S BASKETBALL KEEP THE WINS AND HONORS COMING

MIT Women's Basketball head coach Sonia Raman was elected the NEWMAC Coach of the Year for the second season in a row. Kara Holinski '19 and Taylor V'Dovec '19 were honored with all-conference awards while Kristen Ngan '19 made a visit to the distinguished NEWMAC All-Sportsmanship Team, a newly developed concept intended to honor a student-athlete that best demonstrates the ideals of the NEWMAC and its Code of Conduct.

The honors are based off of Holinski's school record-setting 60 three-pointers in the season and V'Dovec's field-goal percentage of .558 (tops in the league). The winning ways keep coming for Raman and her team as they continue to keep pace with the rest of the league, moving into 2018.

IM OFFICE INTRODUCES THE BEAVER CUP AND ADDS SPORTS

The number of students participating in intramural sports at MIT at a given time has already surpassed 2000. To add to the experience, the office of IM sports used the inclusions of cricket and League of Legends entering 2017. The first cricket championship was won by Masseh Hall. The popularity of League of Legends didn't need to wait a season, as 19 teams in 2 leagues battled via the first ever intramural e-sport.

During that school year, the IM executive board introduced the Beaver Cup as part of the intramural experience to "give people more reasons to be excited about IMs and give participants an excuse to play and try new sports." The first Beaver Cup was won by GAME. Their team name is engraved on the physical trophy, currently seated and available for viewing in building W35.

SOFTBALL HAS SOLID REPRESENTATION ON ALL-CONFERENCE TEAM

After a solid display in NEWMAC play, the Engineers softball team had 4 names on the NEWMAC Academic All-Conference Team. Zoe Hinton '18 and Katherine Shade '18 were given the honor for the second time and Ali Trueworthy '17 and Lisa Zhu '19 were presented the honor for the first time.

A PAIR OF ENGINEERS MAKE HEADLINES AT THE MLB DRAFT

MIT made history at the 2017 Major League Baseball draft as, for the first time ever, two Engineers were selected in the prestigious summer event. First, infielder Austin Filiere '18 was drafted in the eighth round of the draft by the 2016 World Series champion Chicago Cubs. After steamrolling professional pitching at the Cape Cod League pitching, while at MIT, Filiere won the NEWMAC Player of the Year award whilst also picking up many other accolades. Filiere boasts a career .414 batting average as an Engineer with 13 home runs in each of his three full seasons.

Next went lefty pitcher David Hesslink '17, the all-time leading Engineer in wins, who was drafted in the 34th round of the draft by the team he grew up admiring, the Seattle Mariners. In his career wearing an MIT uniform, Hesslink has an impressive 24-10 overall record with a 3.02 ERA and 4 complete games and in the process, striking out nearly 6 batters per 9 innings. Hesslink also joined the front end of his organization en route to working with the Mariners in their baseball operations office.

Hesslink and Filiere have already faced off in professional ball and they look forward to many battles at the highest of levels in the future.

SCIENCE IN REVIEW

As the student newspaper of MIT, where scientific discoveries and interests abound, it seemed remiss for *The Tech* to not have a science section. Iterations of the science column have existed in *The Tech* before, but have not endured. The mission of the current iteration is simple: to share STEM-related news, stories, and discussions of interest to the MIT community. Below is a sampling of the articles published this past volume; we hope the next volume will bring increasingly regular and varied content.

—Vivian Zhong
V137 Editor in Chief

MIT iGEM team uses new CRISPR protein to target cancer-causing RNA splicing errors

By Maxwell Benjamin Nagarajan

"This is the most authentic research experience you can get before grad school," said Dr. Brian Teague, a research scientist in Professor Ron Weiss's lab, about competing in the international genetic engineered machine (iGEM) competition.

Started by MIT as an IAP course in 2003, iGEM has grown into a large international competition of more than 300 schools around the world. iGEM teams use synthetic biology to solve real-world problems, and the competition culminates at the iGEM Jamboree, an event held in the fall with presentations, poster sessions, and opportunities for teams to interact with each other. In one well-known iGEM project from 2004, for example, students from the University of Texas engineered a bacterial system able to take a chemical photograph.

The 12-person MIT team project for 2017 was based on controlling alternative splicing. Genes consist of exons (coding DNA sequences) and introns (non-coding DNA sequences). When messenger RNA (mRNA) is initially transcribed from DNA, it contains both exons and introns. Before the mRNA transcript can be translated into a protein, the introns need to be removed in a process called RNA splicing. Alternative splicing occurs when some exons are not included in the processed mRNA transcript.

To illustrate this concept, the team compared a transcript to an English sentence. A spliced mRNA transcript with all exons included could be "The grass is always greener on the other side," whereas an alternatively spliced transcript could be "The grass is on the other side," changing the meaning of the sentence completely.

Mistakes in alternative splicing can lead to several diseases, including myotonic dystrophy, spinal muscular atrophy, retinitis pigmentosa, and forms of cancer. "Our main avenue for pursuing [control of alternative splicing] was to use a fairly new CRISPR protein: Cas13a," said Molly Stephens '18.

Like other CRISPR proteins, Cas13a can be guided to bind to and cut a specific nucleic acid sequence with a complementary RNA sequence. However, instead of targeting DNA like most CRISPR proteins, which would be a risky change to the genome, Cas13a binds to and cuts RNA. The team built a construct that has the potential to guide a mutated form of Cas13a to a particular mRNA sequence to prevent incorrect RNA splicing. Further testing is necessary, but if successful, this construct could be used therapeutically in small cell lung cancer, the team's disease model.

It wasn't all lab work. Nia Myrie '20 said, "It's a research experience, but I cannot even explain how much I've learned outside of the realm of science." As part of the "human practices" component of their iGEM project, the team met with experts in synthetic biology from MIT and at miRagen Therapeutics. They also presented in an outreach event at the MIT Museum, engaged with high school students, and helped high school teachers design a synthetic biology curriculum.

For the MIT team, one of the valuable opportunities at the iGEM Jamboree was to interact with other teams from around the world. Adil Yusuf '18 said that one of his favorite projects was done by the team from the College of William and Mary. They had an innovative synthetic biology project, but what stood out to him was their approach to the human practices component of their project. Yusuf said that William and Mary's team "assessed the outcomes of previous human practices projects and built a database for past and future projects." This database will help future teams learn from the experiences of past ones when designing their projects.

One aspect of iGEM that stood out to the team was that their hard work does lead to real value for the research community. Stephens said, "One of the most important moments was when we were contacted by someone in the Weiss lab who was interested in what we had produced as an undergrad team."

MIT teams typically start working over IAP, brainstorming ideas for projects. Students learn more about synthetic biology techniques in the spring semester, and do most of the experimental work of their project over the summer. They spend the fall semester preparing for the iGEM Jamboree. All of the information needed to apply for MIT's 2018 iGEM team is available at igem.mit.edu. The application deadline is Dec. 15.

A fiery end for Cassini, Saturn's space orbiter

By Theresa Machemer

This Friday, the Cassini space orbiter will finish its 20-year-long mission by making a "death dive" into Saturn's atmosphere, where heat and pressure will cause it to disintegrate. During its final minutes, the spacecraft will send data back to Earth in real-time eking out as much precious data from the mission as it possibly can — for who knows when humanity will have an opportunity like this again?

The Cassini spacecraft was launched from Cape Canaveral in October 1997 and then spent seven years in transit to Saturn. On the way, it flew by Venus twice, studied the composition of the asteroid belt, and worked with the Galileo spacecraft to observe Jupiter and its system. Cassini also carried the Huygens probe, which landed on Titan, Saturn's largest moon, in 2005 and sent data about the moon's surface and atmosphere to Cassini for 72 minutes before the signal was interrupted by the horizon.

From orbit, Cassini has provided researchers with such a wealth of data that its mission was extended twice, first for the northern hemisphere's spring equinox in 2010 and then for the summer solstice in 2017. During its time in orbit, Cassini has discovered numerous moons, made over a hundred fly-bys of Titan, taken hundreds of thousands of photographs of Saturn and its 62 moons, and provided the data to identify 101 saltwater geysers erupting on the 6th largest moon, Enceladus. During the spring equinox, Cassini could capture the way the sunlight hit Saturn's rings edge-on, allowing researchers to measure the summits of mountains they saw rising from the rings. And seven years later, the summer solstice provided astonishing views of Saturn's north pole, which changes from blue to yellow over the course of the planet's year, ostensibly due to reactions between organic compounds in the atmosphere.

After all of its contributions to our understanding of Saturn and the outer solar system, Cassini has been on a doomed trajectory since April. That's when NASA guided Cassini into an orbital path that took it, for the first time ever, between Saturn and its rings. Cassini has made 20 of these sub-ring orbits, using the last five to dip so close to Saturn that it could directly measure the planet's atmosphere. And it's this path that set Cassini on an inevitable course for vaporization.

The last hours of Cassini's mission could provide valuable data to answer some of researchers' most persistent questions: How was Saturn formed, does it have a solid core, and how long is a Saturnian day?

One might also wonder why NASA is throwing its $2 billion spacecraft into a "death dive" instead of trying to land it or recover it. The answer lies in planetary protection — or, in this case, moon protection. If it's possible that moons like Titan and Enceladus might currently, or could one day, harbor life, then humanity has a responsibility to leave such landscapes uncontaminated.

The new faces of CRISPR

By Meenakshi Sivapriya and Tu-Lan Vu-Han

Last month MIT professor Feng Zhang's lab published two papers in Nature and Science on new CRISPR technology that uses the Cas13 enzyme to target RNA and a new system called REPAIR that allows single base-editing. The Tech interviewed authors Omar Abudayyeh '12, a MD-PhD student at Harvard Medical School, and Jonathan Gootenberg '13, a PhD candidate at Harvard University, to talk about their research and collaboration.

"We went to a DJ Khaled concert when our first paper was published," Abudayyeh said. "This time, we went to an all-you-can-eat sushi place."

Abudayyeh and Gootenberg have become a well-coordinated team. "It's really rare that you find someone that you can work really well with. But when you find that, it's really great," Gootenberg said, recalling other famous scientific duos like Watson and Crick.

Both are well-versed in the ongoing discussions about CRISPR. "We have had the ability to edit genes for many years and so far genetic modification has not brought about designer babies or any such epidemics," Gootenberg argued. "CRISPR just allows the process of genetic modification to be more efficient."

This year, Abudayyeh and Gootenberg have been awarded a place on the Forbes "30 under 30 2018" list in the category of healthcare. We asked them about the award and how it impacted their lives: "It's much like any award. It doesn't change what you do or how you do it. The fulfilment lies in their scientific work, regardless of any awards they receive," Gootenberg explained, "But awards open a lot of doors and opportunities down the road." Abudayyeh brought up one such opportunity: the possibility of opening a lab of their own one day.

Further down the road, Abudayyeh wants to work on ageing and cell senescence. Both remember meeting a Nobel laureate at a conference and asking him about the prize: "He said that he wished he hadn't won the prize, because the things that came with it took away his time to work on his science," they recalled, adding that "there are only so many hours in a day" — and researchers all have to choose how they spend that time wisely.

In making these decisions, the quality of the mentorship that they have received has been very crucial. "Feng Zhang is an excellent mentor," Gootenberg said, looking at Abudayyeh, who added, "I actually started working in the lab expecting to learn how to do science — but I have learned so much more."

Both are aware of the successful road that their careers are taking, but they also remember moments of frustration and failure. "We all have those," they said. "But it's important to remember to persevere through them because we all have these phases and failures happen.They are important and also, in a way, necessary. Patience is the key."

Reflecting on the first issue of Nature and science through the ages

By Maxwell Benjamin Nagarajan

In a tweet celebrating its 148th birthday, Nature announced the release of a digital edition of its first issue, published in November 1869. While a scan of this issue has long been available, Nature took the occasion to dedicate a small webpage to the text of this issue. What were scientists discussing and thinking about 150 years ago? This issue may provide insights into the thoughts and culture of the scientific community long ago.

To put this time into scientific context, Darwin published *On the Origin of Species* in 1859, Maxwell published his theory of electromagnetism in 1864, and Mendeleev presented the Periodic Table in 1869. In the next few decades, Gibbs would develop his phase rule, Boltzmann his statistical theory of entropy, and Michelson and Morley an experiment contradicting the concept of luminiferous aether.

Despite decades of scientific advancement that separate us from the researchers in 1869, a quick look at the articles in the first issue of Nature shows that we can still relate to many of the challenges and opportunities scientists faced then.

One article considered issues in science education: "[T]he method and details of [teaching science] ... are points which can be decided only by experiment, and have not yet been decided at all." How do you balance experiments and lectures in science education? How do you provide resources for teachers and students to conduct experiments? How much time should be devoted to teaching science? These are all questions we are grappling with today. The writer of the 1869 article recommended experiential learning by conducting classroom experiments, taking nature walks in the country, and using microscopes to allow students to see what they were studying.

After reading a few articles in this issue, it isn't hard to notice the implicit assumption that women were not a part of the scientific profession. The article about science education referred to the students as "boys," and an article that summarized the proceedings of a meeting said that in attendance were "800 ... men of all sciences, often with their wives and daughters." We cannot neglect that science was patriarchal. Today there is still significant institutional discrimination against women in science.

The first article in the issue was half poem, half essay, and begins with an evocation that likely echoes a frustration and awe researchers still feel today: "Nature! We are surrounded and embraced by her: powerless to separate ourselves from her, and powerless to penetrate beyond her." The author posed a thought experiment: If we look back on scientists fifty years ago, their greatest achievements and discoveries may seem commonplace today. Likewise, fifty years from now, scientists may look back on us and think of our best work as commonplace. But by looking back, we can see the progress that has been made to better understand nature.

Is there value in looking back at the progress of science? One potential value is to put the great discoveries we learn about in courses into context. During my E&M course, Maxwell's equations were just a set of equations. What work led to these equations, and how did the scientific community respond?

Researchers facing challenging problems may also find a look back refreshing. Knowing that people have struggled with generating hypotheses, designing experiments, and interpreting data for centuries can put the challenges of the research experience into perspective.

Of course, no MIT student has time to study historical scientific literature exhaustively. But maybe reading an old journal article or two will provide some context to the scientific process.

NEWS IN REVIEW

2017 at MIT was a year marked by passionate conflict, but also by a sense of resolute solidarity. On campus, students and alumni clashed with administrators over events which culminated in the closing of Senior House as an undergraduate residence. On a broader scale, the entire MIT community came together to discuss, and often oppose, the nationalist rhetoric and policies of the new U.S. executive authority. Along the way, graduate students rallied for an increase in housing development, CASE's survey helped identify weaknesses in MIT's financial aid system, and the LIGO physics experiment made waves. We said goodbye (somewhat) to celebrated linguist Professor Noam Chomsky, and hello to his potential successor, a young man named Jaden Smith who has a way with words in his own right. In these and all wild times it's impossible to guess what will make next week's front page, and we're looking forward to experiencing the next year in frenetic real-time along with the rest of you. So cheers to you, dear reader of The Tech, for following the news of the bubble with us this volume, and may you remain with us for many volumes more!

—Patrick Wahl
Volume 137 News Editor

2017

Feb. 14: The Engine, MIT's startup accelerator and venture capital fund, announced that veteran entrepreneur Katie Rae would be its next president.

Feb. 15: The Patent and Trademark office allowed the Broad Institute to retain the rights to CRISPR, a powerful gene editing tool, after a hard-fought case against the University of California, which claimed to have invented the technique.

March: *The Tech* examined the motivation behind the Media Lab's Disobedience Award, a $250,000 prize to go to someone engaging in "extraordinary disobedience for the benefit of society." The winner was announced in July 2017.

April 17: UA and class council elections were postponed after the voting system failed and the Election Commission chair subsequently resigned.

April 22: Sarah Melvin '18 and Alexa Martin '19 were elected as UA president and vice president, respectively, running on a platform which focused on mental health resources and political engagement.

April 29: MIT hosted the One-World festival, which showcased diverse student talents and was followed by wildly popular tent parties featuring ample free food.

Oct. 3: Physics Professor Emeritus Rainer Weiss shared the Nobel Prize in Physics with two Caltech researchers for their contributions to the science of gravitational waves and the development of the LIGO experiment.

Oct. 16: Scientists announced that LIGO detected gravitational waves from colliding neutron stars for the first time, an observation that sheds light on how heavy elements form.

Oct. 23: The Cambridge City Council approved MIT's zoning petition for the Volpe site development, allowing the Institute to move forward with its plans to redevelop the 14-acre parcel of land in Kendall Square.

Nov. 11: Vanu Bose '87, a member of the MIT Corporation and a leader in bringing cellular coverage to under-serviced regions in the U.S. and abroad, died of a sudden pulmonary embolism at age 52.

Dec. 8: The EECS Department announced that it appointed Prof. Asu Ozdaglar PhD '03 as its next head, making her the first female EECS department head in MIT's history.

2018

Jan. 3: Star Market, the grocery store located behind Random Hall that many MIT students rely on, announced it would close Feb. 3. There is not a new tenant lined up for the space yet, but there will be discussions about replacing it with Market Basket or another grocery store offering similar variety and affordability, according to Cambridge City Councillor Denise Simmons.

Jan. 19: MIT announced a new policy on consensual relationships that broadly bans any sexual or romantic relationship between MIT faculty, staff, graduate student, or undergraduate student when one party holds authority over the other.

MIT & NATION

Feb. 3: Niki Mossafer Rahmati '18 and Fadi Atieh '20, from Iran and Syria, respectively, were welcomed back to campus after initially being barred from re-entering the U.S. due to President Donald Trump's executive order (the "travel ban"). Three other MIT affiliates who had been barred also arrived back on campus that weekend. In total, MIT has over 100 students and researchers from the seven affected countries.

Feb. 3 and 13: MIT filed amicus briefs with peer universities arguing against the travel ban enacted by the White House in January, quoting an admitted student from Syria who would have been unable to attend under the ban.

July 13: Francisco Rodriguez, an MIT custodian who came to the U.S. in 2006 to escape gang violence in his home country of El Salvador, attended his biannual mandatory check-in with Immigration and Customs Enforcement. Despite complying with the order, he was taken into federal custody.

Sept. 5: MIT administrators responded to Trump's order to end the federal Deferred Action for Childhood Arrivals policy, commonly known as DACA, by declaring that the Institute would fight for its undocumented students to be allowed to remain in the country.

Nov. 16: The House of Representatives passed the Tax Cuts and Jobs Act of 2017 (TCJA). One of the bill's provisions added qualified tuition reductions to graduate students' taxable income, thus increasing the taxes of each of MIT's nearly 7,000 graduate students by $10,000 or more, according to President Reif's estimate.

Members of the MIT community opposed this and other harmful provisions of the bill: the Graduate Student Council organized phone banks to elected officials; students wrote op-ed pieces, including in The New York Times; and MIT lobbied against it.

Dec. 22: Trump signed the TCJA into law. The final version does not include the graduate student tuition waiver provision, but it does include an endowment excise tax. President Reif estimated that this would cost MIT about $10 million a year.

Dec. 22: Rodriguez was released from detainment by ICE after being held for five months. Earlier in the month, the 10th Circuit Court of Appeals in Denver granted a request from Rodriguez's legal team to put his deportation on hold, pending a decision on his appeal to reopen his asylum case.

May 1: Angel De La Cruz, then a senior in Course 6 and a resident of Senior House who was arrested Jan. 6 for unlawful possession of firearms, was granted bail.

May 31: At a press conference, scientists announced that LIGO observed gravitational waves for a third time Jan. 4. This added to the success of the now-famous physics experiment and provided further confirmation for Einstein's theory of general relativity.

June 9: Apple CEO Tim Cook spoke at commencement, underscoring the importance of keeping humans at the center of technological advancement.

Aug. 24: MIT announced that MacGregor Convenience would not reopen in the fall due to declining sales.

Sept. 7: LaVerde's reduced its schedule from being open 24/7 to opening at 6 or 7 a.m. and closing at 2 or 3 a.m. each day.

Sept. 18: Paul Gray PhD '60, in office from 1980 to 1990 as MIT's 14th president, died of Alzheimer's disease at age 85.

Sept. 19: The Engine chose its first seven "tough tech" startups to invest in.

SENIOR HOUSE

April 20: Senior House residents were informed that police had identified the purchase and sale of drugs in the dormitory, and that interviews had been scheduled over the following days between each resident and administrators regarding drug use. The interviews were completely voluntary, but one student told *The Tech* that he was informed it would "reflect badly on the dorm if [students] did not participate." Students were allowed an "advisor" to accompany them in the interview, but this person could not be a lawyer or a Senior House resident. "It felt like we were all going through a [Committee on Discipline] process, except the majority of us hadn't done anything wrong," one resident wrote.

April 26: The Chancellor's Office abruptly cancelled Senior House's annual Steer Roast party, citing unspecified "dangerous behavior," to the anger of students and alumni. The dorm was also placed on "probation." Steer Roast had previously been held every year since 1963.

May 17: Senior House held an all-house meeting during which administrators discussed reports the MIT Police had received about drug use in the dorm.

June 1: Senior House residents were notified that they would need to apply to live in Senior House for the 2017-2018 academic year due to concerns of "very serious, unhealthy behavior" in the dorm. A freshman-oriented dorm program called Pilot 2021 was set to be instated, offering meal kits, exercise classes, career development, and faculty interaction. It was left unclear how many present Senior House students would be allowed to move back into the dorm. Cats and smoking were banned in the dorm, and the bedroom murals were to be painted over.

July 7: After a few turbulent weeks, Chancellor Barnhart announced Senior House would become a graduate dorm starting fall 2017, citing the harassment and bullying of students who directly or indirectly supported the Pilot 2021 program. The decision was met with disappointment and outrage from students and alumni, with DormCon vice president Allie Stanton '18 claiming the administration was punishing a large number of individuals for the actions of a few. Barnhart responded that this was irrelevant if students living in Senior House would not have a good experience overall. To offset undergraduate dorm crowding after the closure, juniors and seniors were given the opportunity and incentives to move into graduate housing.

July 25: Chancellor Barnhart confirmed that the 2015 Healthy Minds Survey had supported concerns of illegal drug use in Senior House. Although students who took the survey were informed that their responses would not be linked to their identities, there was no indication that the responses could be linked to the students' place of residence, leading students, parents, and researchers to question the ethics behind the survey data's use. Lydia Snover of MIT's Institutional Research department confirmed that the Chancellor's Office "did conduct some limited analysis" of the data, but stopped once MIT learned of the error in the consent form.

STUDENT LIFE

March 13: MIT emailed out a food and dining survey to help guide the search for a new dining provider, which began in May.

May 4: MIT No Aramark, a campaign launched by students in the Department of Urban Studies and Planning, started circulating a petition to the MIT community to boycott campus food provider Aramark. The petition cited numerous complaints filed against Aramark for issues such as maggot-infested food and exploitative labor practices, and called for Vice President and Dean for Student Life Suzy Nelson to "deny Aramark the opportunity to bid, and firmly refuse any future contract on campus" when MIT Dining considered new dining providers later that year.

May 23: As of this date, approximately 62 percent of the class of 2017 donated to the Senior Gift Campaign. This was a significant drop from the previous year's 88 percent participation rate and a deviation from the steady increase the campaign had experienced since 2005.

Earlier that year, members of the graduating class called for a boycott of Senior Gift in protest of administrative actions, which included the Senior House moratorium on accepting freshmen. The boycott drew both support and condemnation from fellow students.

Sept. 25: The student group Class Awareness, Support, and Equality (CASE) published the results of their socioeconomic survey. They found that at least one in ten students could not afford food, course supplies, transportation to visit home, or professional clothing at some point during their time at MIT. Nearly half the surveyed students who took leaves of absence also had difficulties paying for their expenses during their time away.

Oct. 5: *The Tech* reported that DormCon student representatives and the DSL have been engaged in a Food & Dining Review process, which seeks to make changes such as a meals per semester system in addition to the current meals per week system; "dining dollars" to spend at retail locations; and the elimination of the Basic tier (swipes can only be used for breakfast and dinner) in favor of only the Any tier (swipes can be used for any meal).

If progress continues according to schedule, a new dining contract with a possibly new vendor will take effect on July 1, 2018.

Dec. 4: In response to the CASE survey results, the UA and DSL launched SwipeShare, a program which allows students who are on meal plans to donate their guest swipes to students who face food insecurity.

Arts in Review

Of all years, 2017 reminded us of the power of the arts — both as a medium for ideas, presented subtly or otherwise, or as a method of escape, to worlds and times unexplored. Among movies, musicals, matinées, and music, rested some masterpieces which are sure to live on famously. Populating both sides of the river there was never a dull moment.

It's always important to mention just how vibrant MIT's arts scene is. Hundreds of students put in thousands of hours building, preparing, practicing, planning, performing, writing, painting, and making for the sake of art and others' enjoyment, a fact that is often underappreciated both by residents and visitors of MIT. One would be hard-pressed to find a weekend where the arts are not being presented on campus, between the infinitude of clubs and groups and exhibits at the MIT museum.

—Torri Yearwood
V137 Arts Editor

Best Reviewed Films of 2017

My Life as a Zucchini
Released Feb. 24, 2017

Dunkirk
Released July 21, 2017

"There is something remarkable of each human decision we witness. Christopher Nolan's storytelling here is both intimate and distant, as we know nothing of these soldiers except for their will to live, yet somehow, I find myself caring deeply of their wefare."

—Ivy Li '21

Beauty and the Beast
Released March 17, 2017

Song to Song
Released March 17, 2017

Good Time
Released Aug. 25, 2017

It
Released Sept. 8, 2017

Mother!
Released Sept. 17, 2017

Kingsman: The Golden Circle
Released Sept. 22, 2017

The Florida Project
Released Oct. 6, 2017

Blade Runner 2049
Released Oct. 6, 2017

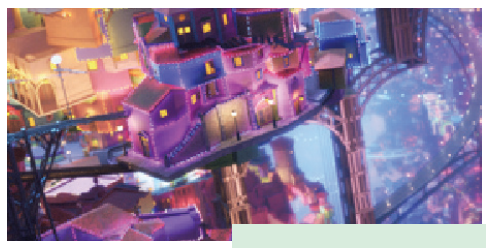
"On one hand, the film offers a nuanced commentary on modern politics, and on the other, a thoughtful analysis of the human experience. We see the writers consistently deliver an engaging, accessible, yet deep story."

—Torri Yearwood '21

Thor: Ragnarok
Released Nov. 3, 2017

The Breadwinner
Released Nov. 17, 2017

Justice League
Released Nov. 17, 2017



Roman J. Israel, Esq.
Released Nov. 22, 2017

The Other Side of Hope
Released Dec. 1, 2017

Coco
Released Nov. 21, 2017

"Ultimately, the knowedge Miguel gains by the closing sequence is not unheard of: we should pursue the truth, and our dreams, while maintaing supportive relationships with those around us. But his path to those lessons is important, and definitely worth watching, with its practically-flawless graphics and gorgeous tunes."

—Patricia Gao '21

Lady Bird
Released Dec. 1, 2017

"Though the subject matter, objectively speaking, might be small, the film feels tremendous. Gerwig's witty script, realistic characters, and vivid sense of setting, combined with a superb cast, give the film an energy that is all its own."

—Cali Gallardo '18

The Disaster Artist
Released Dec. 8, 2017

"Instead, the movie attempts to capture the relationship between Tommy and his young friend and co-star in The Room, Greg Sestero, played by Dave Franco, and to try to understand what kept Greg committed to the movie and his friendship with Wiseau throughout its production."

—Lila Jansen '19

The Greatest Showman
Released Dec. 20, 2017

I, Tonya
Released Dec. 8, 2017

CAMPUS LIFE IN REVIEW

Imagine our campus without the people — no students rushing to class, no professors patrolling the labs, no staff maintaining the grounds or tourists clogging the halls. Without you and me, this place is a lifeless husk; we make up the institute's heartbeat`. In Campus Life, we take its pulse. This year, we heard from College Jeopardy! champions and GRTs, entrepreneurs and immigrants. We met students grappling with life and mental health. Now, we'll hear their stories once more, and beneath them all, if you listen hard, you can hear the rhythm of MIT.

—Chloe Yang
V137 Campus Life Editor

MIT's spiciest memelord

Editor's note: this article was transcribed and arranged by the editor from interviews with Lilly Chin '17, winner of 2017's Jeopardy! College Championship.

Before I got on Jeopardy, I'd catch it on TV, but it wasn't really a big part of my life. I did quiz bowl in high school, and way back in the day I tried out for teen tournament, but I don't really remember that at all. This really only started with my GRT when I lived in Random, Phil Arevalo. He was on Jeopardy, so when the qualifying test came out, he was like, "Everyone should take the test, it's online, it's whatever," so I was like, "Okay, I'll do it."

They have the test in October, and it's only given at one time so that people can't cheat by time zones. It was actually in the middle of class, so I was trying not to get caught by my teacher while also answering the questions very quickly, but I guess it worked out. I got invited to in-person auditions. I went to New York City in November. I got the call that I was on the show in December, and then January, first week of IAP, I was filming.

On TV, Jeopardy shows the question, and that fills the entire screen, and then it jumps to the three contestants, and then you see who buzzes in, and then it's another shot of just the contestant, and then maybe a shot to Trebeck, and that just repeats. You never get a sense of how big the space is. You don't think about the space. I think that was the biggest surprise — it was a place I could walk around in and experience.

Filming was really intense. Everyone's hands were shaking. If you watch the video, you don't know. You don't realize how intense it is until you're onstage and see it as a set, and there's lights and film and everything. Everyone on the Jeopardy staff is really extroverted, and so you need to be really extroverted, too. It's a lot. I was very tired by the end of the first day of filming. I was first call, and even just playing that one game — it was only 30 minutes — was very stressful.

I think the thing I liked most about being on Jeopardy, though, was seeing what a professional film crew does. I've done filming in the past — I used to be part of my high school's film crew for football — so I know everything about how it works, about switching the cuts and the different cameramen. To go to Hollywood, see the soundstages, and see how professional the crew was, and how everyone needs to be in the right place, and how well-oiled the machine was, it felt very weird that I was part of this grand Hollywood film tradition for a TV show.

It also didn't really hit me that I was going to be on TV until the first viewing party. I watched the episode on my giant TV, and seeing the swooping camera angles and me — I was just like, "What?" Watching it again and seeing the answers I remembered and the answers I didn't, I was just yelling at the screen like, "Why'd you miss that, why'd you buzz in on that, you didn't know the answer!"

I would've been happy just making the semifinals and being on TV for two days. I was not expecting to win the entire thing. It's funny because I don't remember much of the tournament. I remember what happens, but while playing, it's just so intense. I do trap shooting, and the coach always tells us, "Take one shot at a time. Don't think about your overall score." It was very much like that. I was just thinking, "Get this question, get this question right."

For all of Double Jeopardy, I didn't realize I had a lead. I was pretty worried about Gary the naval guy. He was really aggressive on the buzzer, especially in the first game, so in the five minutes between the two games, I was like, "Okay, I need to psych myself up, I need to do well and beat him on the buzzer," and I somehow found the zone during Double Jeopardy. I didn't realize I was doing so well until I looked up at the end, and then I did all the math, and I was like, "Oh, this is a lockout game!" I tried to come up with the Final Jeopardy answer, but at that point I was just so excited that I had won the whole thing. I had already decided I was going to answer "dank memes" or "spicy memes." There's always a chance, if you have a lockout game, to put down some funny answer, so I just went with the original plan.

I didn't realize how big of a deal being on the show was until I did it. A lot of people have been reaching out with stories. There was one random person who said, "I have two 14-year-old daughters. They want to do chemical engineering, and they're really inspired to see that you can do well in academics but also have fun." Another person told me how they were in a hospital for a family emergency, and they were watching Jeopardy. When my memelord answer came up, they thought it was really funny. It is really weird being a public figure. I'm a part of people's lives in a way I never expected. I feel really strange to be able to make a difference in people's lives I think.

It's also interesting because you go onto social media and you see random people from all over the country either tweeting, "Yeah, go Lilly!" or "I hate Lilly! Why does she roll up her sleeves?" It was very obvious to me, having spent time a lot of on the internet, that if you're in any place of public position, people are going to hate on you. It was really fun to see that in real life.

I was very publically representing MIT. I've had alums from the '70s email me. President Reif sent me an email. I do student government, so I work with the Chancellor and the Dean of Student Life, and they sent nice notes. I appreciated that. My Facebook was blowing up. Every time I was logging in I would have a hundred notifications. I already saw my face on the TV screen in the Infinite. People were coming up to me and saying, "I'm from MIT, I'm so excited to see you on Jeopardy." I find it crazy that there's so much school spirit.

I'm really excited for [Jeopardy's] Tournament of Champions. Meanwhile, someone made a "Japanese game show" for East Campus bad ideas weekend, and I helped. Japanese game shows have all these environmental hazards. The one that EC made was a wall with a bunch of two by fours sticking out. You stood on the two by fours, and you had to answer trivia questions while the two by fours were being taken out from under your feet. I did that, and my friends saw me helping out, pulling the two by fours out, and they were like, "Do you have a game show problem? You're back to this!" Slightly different, but it was pretty funny.

Lilly Chin is a member of the class of 2017.

MIT: a personal Pandora's box

By Arvind Saraf

I came to MIT as a grad student in August of 2001 after completing my undergraduate studies in India. Like most grad students, I came with an almost impeccable academic record, I had topped the entrance exam for the leading engineering institutions of India (IITs), and I was almost constantly a class topper in college.

I eagerly looked forward to my life at MIT, excited about the cultural discovery and surprises. These surprises started early. On the British Airways flight from Mumbai to Boston, I was served an Asian vegetarian meal (as requested) that included a salad and coffee. In India, we usually eat salad with salt and pepper, and I did the same. The meal included a creamy mix in a sealed cup. I mixed that in my coffee — and though it tasted a little off, I assumed this was the kind of coffee they drank. A few minutes later, the flight attendant asked me if I needed cream. Only then did I realize that I had actually mixed salad dressing in my coffee. Clearly, I was excited and decidedly very open about impending cultural and academic differences while exploring at MIT.

For someone coming from a narrow academic focus, MIT was an opening into the real world. The rich student diversity, the emphasis on a culturally more rounded education, and the sheer breadth of activities on campus was mind-boggling. Grad school wasn't just about competing with other students as I was used to, and a person wasn't to be judged by the single metric of GPA. My social skills weren't strong — my confidence had come from purely academic performance, and that took a nosedive.

I had always been a strongly self-critical person. If I did less than stellar in a certain subject or test or evaluation, I would be embarrassed to face even my classmates. I assumed external judgement if I did not match my internal expectations. This made me adopt a very closed and unapproachable persona, perhaps because I believed it made me appear intensely academically focused — and thus prevented criticisms about lack of focus or effort. Even at MIT, I was more inclined to preserve this persona than I was to evolve. Unwilling to break my mold in real life, I discovered and started spending time in online chatrooms where I could be free.

The time I spent distracting myself made me feel guilty. I began to lag academically. Embarrassment made me avoid working in my lab — I spent time in Athena clusters where I felt I could be hidden — until I forced a work blitz that would put me back on track. I couldn't focus on work there, either. Guilt distracted me. The deeper I dug myself, the harder it became to return to level ground. Depression and my escape from it had me spending unproductive weeks away from labs. I was stuck in a depressingly addictive downward spiral.

My advisor, department, housing warden, deans, friends, and MIT Medical tried their best to help, but I resisted seeing, meeting, or reporting to them. My mother visited all the way from India twice to sort me out. But my pride was too strong — I still believed only I could help myself out. Depression and arrogance is not a good mix. I was practically directionless, and worst of all, I avoided anyone who tried to help me.

I took a withdrawal from MIT in 2004 and came back to India. The first few months were tough — I tried to keep myself busy, reading and writing a bit, but I would often lapse into regret about the opportunity I had lost, the learning I would have had, and the friends I would have made.

I took up a couple of internships. The first was through MIT France followed by Google India. These internships helped me start afresh — I was free from the pending backlogs yet back in the workforce. I converted my second internship into a full time role.

In parallel, I tried to break my social constraints, push myself into social spaces, and get over my fear of being judged. In France, I took up backpacking and learned French as an interest — and made friends doing a language exchange practice. Back in India, I took up theater, dance workshops, and more. Being surrounded by people who didn't know me made me lose my own prior asocial expectations. I began to enjoy being with people.

Once in a while, thoughts of my lost opportunity still come when talking to old MIT classmates or friends, reading news, or seeing movies based in Boston or MIT (most recently, when I stumbled across *Good Will Hunting*). When I try to focus long and hard on a work problem, my mind sometimes wanders off to these regretful thoughts. However, I have learned to take a complex work problem and think through or discuss the most immediate next steps, and I break out of the distressing thoughts by working on the clear next steps. This keeps my mind constructively engaged instead of getting stuck and letting self-doubt set back in.

My MIT experience, which involved facing and then overcoming my depression, humbled me. I became less judgemental, more understanding, and more forgiving to others — and most importantly, I became less critical and more forgiving to myself. I learned to not take myself too seriously. Getting over this low phase was much more difficult than most complex academic assignments, but so worth it.

TECH TRANSFERS

Nir Shavit

America is now my home, but unlike many people who "immigrate" and then go through the process of building a life in their new country, I gradually built a life to the point where I can now say that I have indeed "immigrated."

I was born in Israel to academic parents, and at age six, I moved with them to LA. I remember my first moments in the US: the big sun rising at the end of a wide avenue, the endless food shelves in the super market, the Gemini spacecraft docking in space on TV, and the absolutely enormous size of the cars.

I returned to the US at age 15 for one year to get a taste of 31 flavors, ice-skating, and high school graduation. America was enchanting, but I left it eagerly to go back to Israel, the army, and university. At age 24, I came to intern in LA for a summer and discovered a new America, an America seen through an adult's eyes.

At age 27, I met an American girl (surprised?) and followed her to live in Cambridge. A couple of years later, I went to postdoc at Stanford and then at MIT, but then moved back with the girl to Israel, where I started my academic career at Tel-Aviv University.

But my wife loved America, and so we compromised, spending the next 20 years moving back and forth every few years, maintaining homes and academic careers in both countries. Gradually, as with anything you invest time in, America became familiar, and I fell in love with it: with the streets, the coffee shops, the snow and the rain and the Charles on a sunny day. I raised my children here and grew to see America through their eyes: a large, hugging land of opportunity where most of the time you have no idea how to correctly pronounce a person's name.

In 2011, I joined MIT and found a thrilling academic home. I had, in all aspects of my life, finally immigrated.

Nir Shavit is a Professor in the Department of Electrical Engineering and Computer Science.

Editor's note: Tech Transfers is a photo series by Professor Daniel Jackson that features immigrant members of MIT.

Fadel Adib

I was born in Tripoli, Lebanon in 1989 — the same year the civil war ended. I grew up listening to stories of how my parents narrowly escaped the horrors of a sectarian civil war. My parents enrolled us in a secular school, and I didn't know who among my best friends were Christians or Muslims until I was in middle school. It didn't really matter to us.

By the time I entered high school, politics had started creeping into our daily lives. From high school through undergrad, I had to live through a couple of wars and a series of political assassinations. They were frustrating; they made me feel helpless. At the same time, it was heartwarming to witness how people came together for humanitarian support in times of war and struggles.

When I came to the U.S. for graduate school in 2011, my first pleasant shock was to see that there were no political distractions. I could simply focus all my time on what I loved doing: research and exploration. Today, as an assistant professor at MIT, I wish my students had that same luxury. Somehow, divisive politics made its way into people's lives in the US over the past year. But I am hopeful: growing up in Lebanon has taught me that such precarious times bring people together toward common, higher goals.

Fadel Adib is an Assistant Professor in the Program in Media Arts and Sciences.

Editor's note: Tech Transfers is a photo series by Professor Daniel Jackson that features immigrant members of MIT.

Leaving the MIT whirlwind

By Katherine Young

My first two years of college, I found myself getting caught up in a flurry of so many obligations and classes that I couldn't even remember how many organizations I was a part of. Everyone seemed to be doing so much; why shouldn't I? Each break from MIT was a time to reset, but once I returned to campus, the whirlwind picked up again, leaving me burned out.

Coming back from my MISTI France internship last August, I didn't want to leave Europe. How could I leave that idyllic lifestyle, with the perfect location, a compelling project, managers I looked up to, and amazing friends? I justified my departure by telling myself, "I don't belong here; I belong on the other side of the ocean." In other words, it was time to go back to "real life."

What did that mean to me? Real life meant America, MIT, violin, 6.005, hectic schedules, everything I was used to. I remember feeling guilty for not challenging myself technically that summer — I didn't study for technical interviews, barely worked on a personal project, and spent a lot of time working on the business side for my company. I felt, perhaps wrongly, like it was one of my least productive summers, but maybe the point was to learn things outside of the technical realm. As my fellow intern told me, "You can't work 12 months out of the year."

I came back to the "real life" I was just describing, but this time there was a key difference: I didn't succumb to the external pressure of taking on too much. As my friend who went through a similar realization put it, "I don't have to be the freaking president of every club I'm in!" Thus, I turned many club commitments, such as my absurd number of dorm government positions, into open pursuits that I could do on my own time: I practiced a different language, ran around Boston, played music with friends, and went to Bible studies. I had internalized the French mode of *la tranquillité* — peacefulness — and didn't let that pressure unique to MIT touch me. Despite it being my junior fall, last semester was my easiest one here. I am no longer in the bubble.

That wasn't my last MISTI experience, however. I just spent a month teaching math and programming to high schoolers in Marrakech through Global Teaching Labs (GTL) Morocco. My main goal was to instill critical thinking and a can-do attitude for problem-solving. Was it exciting? Yes, especially when one of my students solved a 6.006 pset problem immediately, despite not knowing what an algorithm was

> **Each break from MIT was a time to reset, but once I returned to campus, the whirlwind picked up again, leaving me burned out.**

30 minutes prior. Was it challenging? Yes, at times, when despite yelling at the top of my lungs for everyone to quiet down, I couldn't even hear my own voice. During those four weeks, my students wrote their first computer programs, made their first data visualizations, and discovered the many magical utilities of graph theory.

This time, on the plane back to Boston, I tried to compare this MISTI experience to my last one. My awareness went further than it had last summer: I realized that what I was coming back to didn't have to be what I thought of as my "real life." Who's to say that "real life" can't exist outside of MIT, or even America? While trying to get my students to question everything, I realized I hadn't been doing that myself. The act of inquiry applies not only to science and math, but also to life. This is probably what they mean by learning from your students.

Katherine Young is a member of the class of 2018.

Corporate polish

By Laura Yvonne Facusse

The other day, a friend of mine put in a good word for me for an amazing internship opportunity. He wrote, "Laura is not corporate polished, but she built a cosmetics manufacturing enterprise with no science background at all. She hustles and makes it happen. If she doesn't know how to do something, she will figure it out and learn it inside out."

I was not pleased with the assessment, but I agreed. I realized I am not corporate polished, and I knew why. At age 13, when my mother committed suicide, I decided to say "f*ck it" to everything I disliked, namely social norms. She was an artist with dreams, but she felt trapped in a conservative housewife role with six kids and didn't feel free. I felt that one of the things that led to her depression was having to sacrifice who she really was for who she "had to be." I didn't want to live a life dominated by fear, so I became a bandit. As Steve Jobs would say, "It's more fun to be a pirate than to join the navy."

I embodied this role, especially when running for student council president at my high school. My campaign was all about being a nonconformist, and when I won, the faculty was worried I had revolutionized the student body and tried to veto my candidacy. To their dismay, I prevailed. I carried this attitude with me when, later on, my start-up's manifesto was "The Woman I Want to Be."

I created a line of chic natural cosmetics for Latinas called Vonne. It was inspired by a promise I had made to my mother, Yvonne. She always had business ideas, but I knew she would never pursue them, so I would always tell her, "When I grow up, I promise I will do them for you." The Vonne manifesto encouraged women to be free and authentic in an ultra conservative society. In Latin America, a place full of machismo, the bandit feminist approach became a marketing success for the female audience.

After coming from the jungles of Latin America, where everything is 20 years behind, to MIT, where everything is 20 years ahead, and while looking for a job, I realized I needed to say goodbye to this bandit persona. The friend who wrote me a recommendation told me, "I think it sucks that this 'corporate polish' undermines your true potential." Nonetheless, we were on a mission to "sophisticate" me, and he offered me his "polishing" services. His first lesson: "Laura, do you remember the discussion you had with our IDM professor, Matt Kressy, in product design lab about the importance of a product's packaging? 'Polishing' is packaging for corporate employers."

> **At age 13, when my mother committed suicide, I decided to say "f*ck it" to everything I disliked, namely social norms.**

The professor argued that companies spent too much time deciding on packaging, and it involved too many people's opinions in the process. The product inside was more important, he said, and weirdly enough, it took less time to develop than the packaging. I strongly objected and argued that packaging was equally important because if the packaging wasn't good, no one would pick the product off the shelf.

Some of us spend more time developing our private personas while others focus more on their "corporate polished" public personas. In the end, I realized I agree with the professor. Developing your private persona should take more time than developing your "packaging."

However, I felt it was time to invest in my packaging. I needed to pay the bills. I needed to wear heels and make deals. Learn the jargon. Sign up for "Power and Negotiation" in the fall semester. Learn finance and ramp up my technical skills. Rehearse for recruiting. I looked in the mirror and asked myself the typical Behavioral Interview Questions: What is my background? Why should they hire me? Why am I interested in them? Why do I want this job?

After going over these questions repeatedly, I took a long pause and realized I rejected the idea of being corporate polished. I didn't want to sacrifice who I am for who I "had to be" like my mother did. Somehow, the teachings from my Case Studies in Logistics and Supply Chain professor, Jonathan Byrnes, kept popping in my head. In every class for the whole semester, he repeated that when you are stuck on a problem, you need to take a walk by the river, and so I did.

After 20 years of this painful internal struggle, I finally became deeply aware of why I did the things I did. Being at MIT has helped me realize that I needed to balance my inner product and my packaging in order to be successful. It finally dawned on me that this corporate polish would enable me to really become "The Woman I Want to Be," because this sophistication would open new and bigger doors for me. This rehearsing for recruitment wasn't solely about getting a job; it was about finding, trusting, and believing in myself.

I need to look and feel the part; I need to be professional and confident. I am only going up, not down. I realized how silly I was being and that it was time to move on, away from my past. I need to go beyond making peace between my private and public personas. I need to reinvent myself. I need to push the envelope instead of fine-tuning an obsolete, broken 13-year-old bandit.

Laura Yvonne Facusse is a first year student in the MIT Integrated Design and Management graduate program.

Paying it forward

Editor's note: this is the first in a series of articles written by various MIT Graduate Resident Tutors about their experiences.

Mary Tellers, East Campus

You know the scene in *The Sound of Music* where Maria skips up to the gates of the Von Trapp Manor with two pieces of baggage and a song about beating imposter syndrome? That was figuratively me moving to MIT in 2015. In my imagination, those two awkward pieces of baggage were titled "Forever Alone" and "PTSD." I set those two pieces of baggage down and asked myself, "What can I do to support mental health on campus?" Not because I'm some saintly nun, but because volunteering is a good way to meet people, and helping other people's mental health makes me feel better about my own. In my undergrad days, I worked at a crisis intervention and peer counseling hotline, and it was the best thing I did with my time. I was ready to get back into the mental health support game!

Alas, MIT doesn't have a hotline like that. Instead, I started my PhD looking for *something* to do for mental health, even though I didn't know what form that would take. Had you told me it would come in the form of being an "adult in residence" (aka GRT) to 39 undergrads, I would have laughed. But then I started hanging out with one of the GRT's in East Campus, and I found out there was a job open. Thus began my deliberations.

Did I want to give up my nice

> **I asked myself, "What can I do to support mental health on campus?"**

pseudo-adult grad apartment for some ancient building? Did I want to live with the noise of boisterous young adulthood? I wasn't sure. I was sure, though, that I wanted to be the resource person, the "I just need a hug" person, and the checking-in person. I wanted to feel useful, and I knew I'd enjoy the availability of social time. Also cats. Having found my *something*, I applied, interviewed, and got the job. It was pretty exhilarating.

Living on hall is less exhilarating, but still rewarding. Mostly I hang out in the lounge or make weekly waffles. I socialize and hope my students have gotten the message that if shit hits the fan, I'm here to help clean up the mess. (Not literally. God, I hope I haven't given them any Bad Ideas). Being a GRT works for me: I'm an extrovert, I don't have any other time-consuming extracurricular activities, and I fit into the culture on my hall. I don't get to put on my mental health supporter hat every day, but when I do, it's to help people I care deeply about.

To return to my *Sound of Music* metaphor, I've lightened my baggage since coming to MIT. For one, I threw out my self-deprecating "Forever Alone" identity like Maria rid herself of ugly clothes. I now use the "PTSD" guitar to sing Kumbaya with my residents. Just kidding, this metaphor fell apart. What I really mean to say is that helping other people, especially in a community like the one I live in at East Campus, has helped me to be a happier and healthier person at MIT. My residents are probably rolling their eyes right now because I'm so sappy, but DEAL WITH IT, GUYS.

Aditya Bhattaru, East Campus

I can't do commitment. It doesn't matter if I'm promising to go out next Friday with friends, or if I'm getting involved with a cool project, I wheedle and struggle and stress until I manage to put myself out there or just give up. Part of the problem is that I like my time to be open; obligations mean I have less time to just wander about and pick up random things to do. I tend to feel like commitments restrict my life excessively, especially since I'm a researcher with odd hours.

Knowing this, you might ask me, why would I ever ask to become a GRT? It's not often that a graduate student would say they want more work. In between class-

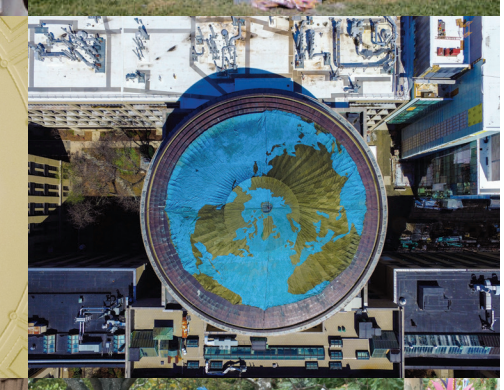
> **There's something incredibly fulfilling about being a pillar of support for undergraduate students.**

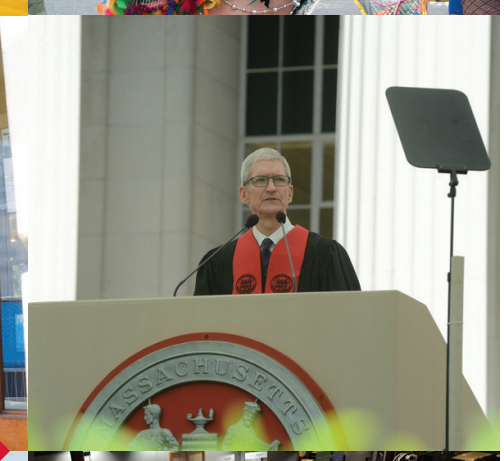
es and research, most of us are up to our eyeballs in things due the next day. We came to MIT for a world class education, for the wonderful resources and opportunities that emerge from every corner. Taking on more work and more stress seems like crazy talk, an exercise we don't need in our lives.

Yet, as studious and focused as graduate students are, I think we benefit from facing challenges and having work outside of our field of study. I think we can find fulfillment in ways other than new, exciting research. Maybe that's what draws so many graduate students to the GRT program: because despite the apprehension, there's something incredibly fulfilling about being a pillar of support for undergraduate students. Many of us were able to lean on our RAs when we were undergraduates, and the academic and social support they provided was invaluable; being able to offer that in return is a rewarding process, oftentimes worth the extra struggle.

At the same time, many of us are working in highly technical fields that involve a great deal of math and science. Helping a student manage their stress, mediating conflicts, and creating a community are skills and challenges that are outside the realm of expertise of most MIT graduate students. It definitely takes some level of hard work, but when it's not the same type of challenge, it's not as stressful as you'd think. If anything, it helps you develop those soft skills that you might not get a chance to exercise doing technical research.

Sure, if I wasn't a GRT, I wouldn't struggle with extra work sometimes. I wouldn't have to change my plans slightly because of an urgent text. I'd probably have more time to relax. But I wouldn't be as happy. There are few things I've done that are as satisfying or as worth my time as being a GRT.





WE WOULD LIKE TO THANK
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AND ALL OF OUR READERS.